

T 9536 US

Claims

5 1. An air vent, especially for vehicle air-conditioning, comprising a frame, a plurality of vanes that are pivotally arranged around a first axis, and at least one coupling element with which each of said vanes is coupled, said coupling element being capable of being adjusted relative to said first axis between a neutral position in which said vanes are parallel to each other, and a comfort position in which at least some of said vanes are swiveled in directions opposite each other.

10 2. The air vent according to Claim 1, wherein said first coupling element is pivotally coupled with said vanes by means of a slotted link guide.

3. The air vent according to Claim 2, wherein said slotted link guide consists of a slotted link in said coupling element and a pin provided on said corresponding vane and engaging said slotted link.

15 4. The air vent according to Claim 3, wherein a neutral vane is provided, said slotted link associated with said neutral vane extending in a straight line and wherein an intermediate vane and an outer vane are provided on either side of said neutral vane, said slotted link associated with said outer vane being more strongly inclined relative to said neutral vane than said slotted link associated with said intermediate vane.

20 5. The air vent according to Claim 1, wherein said coupling element is connected to some of said vanes by means of a coupling rod each.

25 6. The air vent according to Claim 5, wherein at least one neutral vane is provided that is connected to said coupling element by a straight-line slotted link guide, and wherein an intermediate vane and an outer vane are provided on either side of said neutral vane, said intermediate and outer vanes being connected to said coupling element by at least one coupling rod.

7. The air vent according to Claim 6, wherein said outer vanes and said intermediate vanes are each connected to said coupling element by a coupling rod and wherein said two coupling rods of an outer vane and of an adjacent intermediate vane are mounted on a common pin on said coupling element.

5 8. The air vent according to Claim 7, wherein said pin on which said coupling rods are mounted, as seen from said neutral vane, lies further outside than the respective outer vane, and wherein said coupling rod associated with said outer vane together with a direction defined by said straight-line slotted link guide encloses a smaller angle than with said coupling rod associated with an adjacent
10 intermediate vane.

9. The air vent according to Claim 6, wherein said outer vanes and said adjacent intermediate vanes are connected to each other by a connection member each and wherein said coupling rod engages said connection member.

15 10. The air vent according to Claim 6, wherein two neutral vanes are provided which are connected to each other by a connection member, and wherein said connection member is connected to said coupling element by means of said slotted link guide.

20 11. The air vent according to Claim 1, wherein said vanes are arranged so as to spread out fan-like in said comfort position so that a diverging air flow is generated.

12. The air vent according to Claim 1, wherein said vanes are arranged in a converging fashion in said comfort position so that a converging air flow is generated.

25 13. The air vent according to Claim 1, wherein said coupling element can be adjusted in translational direction.

14. The air vent according to Claim 1, wherein at least one return spring is provided that biases said coupling element into said neutral position.

15. The air vent according to Claim 14, wherein said return spring acts between said coupling element and said frame.

16. The air vent according to Claim 14, wherein said return spring acts between said coupling element and one of said vanes.

5 17. The air vent according to Claim 1, wherein, on said frame, an actuation element is provided that interacts with said coupling element.

18. The air vent according to Claim 17, wherein said actuation element is provided with a push-button that is accessible from outside of said air vent.

10 19. The air vent according to Claim 17, wherein a latching mechanism is provided that can hold said actuation element in a pushed-in position, so that said coupling element remains in said comfort position until the next actuation.

20. The air vent according to Claim 1, wherein a sliding guide is provided by means of which said coupling element is mounted so that it can slide on said frame.

15 21. The air vent according to Claim 1, wherein a second coupling element is provided that is mounted in such a way that it can slide on said frame and on which said vanes are arranged so as to be able to pivot around said first axis.

20 22. The air vent according to Claim 21, wherein said second coupling element can be slid in a direction that is perpendicular to a sliding direction of said first coupling element.